

**The City of Bloomington's
Utility Service Board (USB)
meets every other Monday at
5:00 pm. USB meetings are public
meetings and citizens are
welcome to attend, observe, and
record what transpires. For more
information concerning meetings,
contact the Director's Office at
501 North Morton Street
Bloomington, IN 47404
812.349.3650**

www.bloomington.in.gov/utilities

Mayor Mark Kruzan



City of Bloomington Utilities

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2005 Water Quality Report



Monroe Reservoir—Bloomington, Indiana

Mark Kruzan, Mayor

City of Bloomington Utilities
Water Quality Office

www.bloomington.in.gov/utilities

Once again the City of Bloomington's water meets
and exceeds all Federal, State, and Local Guidelines!

In order to ensure that tap water is safe to drink, USEPA and the Indiana Department of Environmental Management prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. This publication describes those guidelines for the City of Bloomington drinking water. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Este informe contiene información muy importante sobre el agua potable. Tradúzcalo o pídale a alguien que se lo explique.

Safe, Reliable Water Delivery for Today and Tomorrow

Work continues on the **\$13 million renovation** of the Monroe Water Plant's treatment and distribution equipment. Important improvements have been made in 2005 to ensure that our customers receive safe, high-quality water.

The addition of a state-of-the-art computer control and data logging system later this year will allow plant operators at the Monroe Water Plant to monitor pumps, mixing systems, and chemical distribution.

Our department takes the protection of our community's water source seriously, and we are committed to providing safe water to our customers; therefore, additional measures to secure our water source have also been implemented at the Monroe Water Treatment Plant.

The delivery of reliable, safe, high-quality drinking water is at the forefront of every decision that we make regarding our community's water needs. Customers are encouraged to contact the City of Bloomington's Utilities Engineering Department at 349-3660 with your comments and concerns regarding these or any other projects.

How You Can Save Water

Water conservation saves you money and makes an important contribution to a better future. Here's how to get started:

Stop Leaks. Check appliances and outdoor systems such as sprinklers for leaks. Get to know your water meter - it provides important information about consumption and leaks. Common leaks waste 10% of the water used in many homes.

Replace old toilets. Toilet-flushing is the top water user in the home. If you haven't replaced your toilets in 10 years or more, you'll benefit from the new high-efficiency models.

Buy an efficient clothes washer. Washers are the second-largest water user in the home. New "Energy Star" certified models may use 50% less water and energy per load.

Visit www.h2ouse.org for an array of water-saving tips.

Source: [Parade Magazine](http://ParadeMagazine.com), April 24, 2005: page 5

이 서류는 식수에 관한 중요한 정보를 담고 있으니, 필요하면 다른이에게 번역이나 낭독을 하게하여 내용을 숙지하시기 바랍니다.

Your Drinking Water Source

The source of the City of Bloomington’s drinking water is surface water from Monroe Reservoir, located 9 miles southeast of Bloomington. The City of Bloomington has received a copy of the Indiana-Monroe Reservoir Source Water Assessment. Federal guidelines require the State of Indiana to issue Source Water Assessments in order to identify significant or possible sources of contamination. Information concerning Monroe Reservoir’s Source Water Assessment is available by contacting the City of Bloomington’s Water Quality Office.

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses
- Organic chemical contaminants, include synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities

Last year, as in years past, your tap water met all EPA, state, and local drinking water health standards. The City of Bloomington Utilities Department vigilantly safeguards its water supplies and once again we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard. Utility staff processes over 85,000 water samples every year in order to ensure we are providing safe water to our customers. Because of data quality problems, CBU was unable to submit qualified data for the Unregulated Contaminant Monitoring Rule during two quarters in 2001 and 2002. CBU did sample for these contaminants, however our contract laboratory was unable to provide adequate quality assurance tests according to EPA requirements. The sampling for these parameters will be conducted during 2005.

*DEFINITIONS:

MAXIMUM CONTAMINANT LEVEL (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technique.

MAXIMUM CONTAMINANT LEVEL GOAL (MCLG) - The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

ppm - parts per million. Equivalent to milligrams per liter (mg/l).

ppb - parts per billion. Equivalent to micrograms per liter (ug/l).

pCi/l - Picocuries per liter is a measure of radioactivity in water. A picocurie is 10⁻¹² curies and is the quantity of radioactive material producing 2.22 nuclear transformations per minute.

Action Level - The concentration of a contaminant that triggers treatment or other requirement that a water system must follow. Action Levels are reported at the 90th percentile for homes at the greatest risk.

Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

CFU/ml - Colony forming units per milliliter.

Colony Forming Unit - An area of visually distinct bacterial growth which may result from a single bacterium or pairs, clusters or chains of bacteria.

Detected Contaminants Table

Substance	Highest Level Allowed (EPA's MCL*)	Highest Level Detected	Ideal Goals (EPA's MCLG's*)	Sources of Contamination
Microbiological Contaminants				
Turbidity	Treatment Technique*	0.29 turbidity units ¹	None	Soil runoff
Radioactive Contaminants				
Alpha emitters ²	15 pCi/l*	0.4 + 1.3 pCi/l	0	Erosion of natural deposits
Inorganic Contaminants				
Barium	2 ppm*	0.018ppm	2 ppm	Erosion of natural deposits
Copper	1.3 ppm (Action Level)	0.018 ppm (90th Percentile)	1.3 ppm	Corrosion of household plumbing systems
Fluoride	4 ppm	1.30 ppm ³	4 ppm	Water additive which promotes strong teeth
Nitrate	10 ppm	0.26 ppm	10 ppm	Erosion of natural deposits
Lead	15 ppb (Action Level)*	5.2 ppb (90th Percentile)*	0	Corrosion of household plumbing systems
Volatile Organic Contaminants				
Total Trihalomethanes	80 ppb	47.8 ppb average ⁴	0	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	60 ppb	35.1 ppb average ⁵	0	By-product of drinking water chlorination
Synthetic Organic Contaminants				
Atrazine	3 ppb	0.34 ppb	3 ppb	Runoff from herbicide used on row crops
Di(2-Ethylhexyl) Phtha-late	6 ppb	0.92 ppb	0	Discharge from rubber and chemical factories
Unregulated Contaminants				
Beta emitters ^{2,6}	50 pCi/l	1.3 + 2.1 pCi/l	0	Decay of natural and man-made deposits
Chlorine, Free Residual	Not Regulated	1.3 ppm	Not Regulated	Disinfection process
Chlorine, Total Residual	5.0 ppm	2.6 ppm	None	Disinfection process
Heterotrophic Plate Count	500 CFU/ml*	21 CFU/ml	None	Natural lake bacteria, wildlife, septic systems
Sodium	Not Regulated	4.7 ppm	Not Regulated	Erosion of natural deposits

LISTED ABOVE are 16 contaminants detected in Bloomington's drinking water during 2004. All are below allowed levels. Not listed are the 50 primary contaminants for which we tested that were not detected.

ADDITIONAL INFORMATION:

- 1 Turbidity levels ranged from 0.08 to 0.29 with an average of 0.13 turbidity units. The lowest level of compliance on a monthly basis was 100%.
- 2 Data listed are from 1998 and are the most recent testing done in accordance with regulations.
- 3 Fluoride levels ranged from 0.45 to 1.30 with an average of 0.97 ppm.
- 4 Total trihalomethane levels ranged from 34.7 to 68.6 ppb.
- 5 Haloacetic acids (HAA5) levels ranged from 20.4 to 56.6 ppb.
- 6 Based on community size, City of Bloomington Utilities is not regulated for Beta emitters.